suppose you could show me how to run a plantation of

"Oh, would you give me a chance, Suh?" says Eustis

eager.
"Might knock together a bungalow fit to live in, thinkin' out loud. I've no doubt," goes on Morrison, thinkin' out loud. "It would give me something to do, at least. Guess that's what I need, after all. I've been meaning to try the Tropics too, and— Well, we'll talk it over. Meanwhile, Zink," and he turns to me, "who might this young man be?"

"Please, Suh, I don't know, Suh," says Eustis.

"Well?" says Morrison. But I'd got my clue at last. "Me?" says I. "Why, I'm the next leaf on the pad."
"Indeed!" says he. "Then this must be a red letter

"Say, you win," says I. "I picked you for a dead one;

but, honest, you're a live wire.

Gets a good humored motion in Morrison's mouth corners, that does. "Thank you," says he. "But why am I indebted to you for-

"Your lucky day," says I. "See? You're liable to be wantin' to hike out for Jamaica to give that plantation stunt a whirl. In that case you're likely to cash in them Smelter shares, eh?

"By George! But I was just puzzling over that,"

says he.

"Don't!" says I. "The Corrugated will fix that for you. There's our card. We'll let you unload on us. Bother? Why, gettin' a quarter changed into nickels at a picture arcade won't be in it. Come around in the morning and—no, suppose I call for you about eleven A. M. in a taxi and tow you over for a talk with our president, Mr. Ellins? It'll be all the same if you do or don't. How about it?"

DID I land him? Why, say, between me showin' him how easy it was, and Eustis pumpin' him full of descriptions about wavin' palms and blue mountains and white roads, I almost had to hold him back. And it wa'n't ten minutes from the time I leads him in until he's closed the deal and is out shakin' hands and biddin' me goodby. Later on Eustis drifts around to assure me that, with him bossin' a big banana plantation, wearin' a wide brimmed hat, and ridin' a horse of his own, that cheap Foster person won't be anywhere in sight. So altogether that afternoon's work scored some.

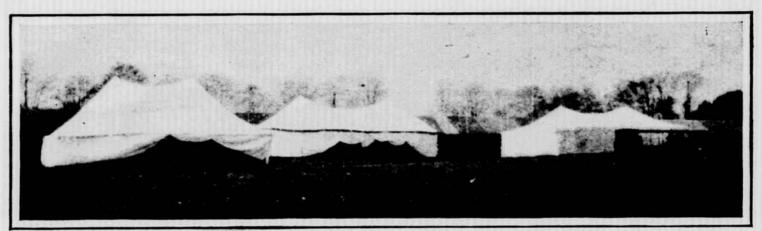
"Son," says Old Hickory, as he shoves across the table that whackin' big commission check, "I'm not asking how you did it, for it seems too all fired prompt and weird to have been strictly according to Hoyle; but if you can keep out of jail long enough you have a great future before you."

"That's what I'm diggin' in my toes to overtake,"

says I.

WHAT IT COSTS TO

Dean of American Amateur Aviators, Chief of Staff, United States Aëronautical Reserve BY CLIFFORD B. HARMON



A Row of Aëroplane Tents.

'AM not going to tell you what you might spend on flying, but for how little you may be able to fly; so you see that in a sense the title of this article is misleading. An aëroplane can be as expensive a toy as a steam yacht. Although this question comes up almost daily, it is difficult to give more than an approximate answer to it; for the aeroplane has not yet been commercialized to the extent of the automobile. If no man can by "taking thought" add "a cubit to his stature," neither can any man by reading aëroplane catalogues learn exactly to the dollar what it is going to cost him to fly.

Of course the first thing to do is to get an aeroplane. I am not here going into the much mooted discussion as to whether a monoplane or a biplane or a multiplane is the best kind of aircraft. Personally I incline to the biplane, believing that it is easier to operate and less treacherous. As yet no American monoplane has made any marked success. There is one being manufactured in this country, the Walden-Dyott; but the Blériot people have an American

agency.

Abroad, the best known types, perhaps, are the Blériot monoplane and the Farman biplane. These may be bought at the factory for twenty-five hundred and five thousand dollars. The duty on aeroplanes is very high, forty-five per cent., and in addition you must calculate, if you desire a foreign machine, on spending about five hundred dollars to bring it over the ocean. This amount takes account of the services of a mechanician to put the machine together on this side. The imported machines come pretty close to costing not far from five thousand dollars for the twenty-five-hundreddollar machine, and eight thousand for the one listed at five thousand dollars. My Farman biplane cost me ten thousand dollars. After six

months' use I sold it for six thou-

sand.

The Curtiss and the Wright aeroplanes are the two principal types of American biplanes. The former sells for seven thousand dollars, the latter for five thousand. The Curtiss people also make a onepassenger aeroplane that can be bought for five thousand dollars, which is similar in construction and pattern to the one used by Mr. Curtiss in winning "The Scientific American" trophy in 1908 and 1909. It is the custom of manufacturers to give an aëroplane its trial trip before turning it over to the wouldbe flyer. You see, the price of an aëroplane is not much higher than that of many makes of automobiles. It is unnecessary to comment that as the demand grows greater the price of aeroplanes will decrease.

It is possible that manufacturers put too high a price on aeroplanes; but during the experimental stage automobiles were much more expensive than they are these days when they have become so universally commercialized. Examine an aeroplane closely and you will see that it is made up of something more than a wooden frame covered over with cloth and held together with wires. To fly, an aeroplane must be a perfectly constructed craft, combining in itself the best materials and the finest workmanship in every detail.

An industrial exhibit recently held in New York city had for sale a number of aëroplanes ranging in price from two thousand to seven thousand dollars. The attendants in the booths explained that some of these had already successfully flown. Although on the market only one year, there are in this country today about ten thousand machines in actual existence or in course

of construction.

An Aviation Emergency Hospital.

I see the claim made by an aeronautical journal that "Aviation is the coming profession. In three years the demand for experienced aviators and mechanicians will be as great as the demand for chauffeurs and auto experts is today." In the trade papers I notice that a "complete knockdown Blériot XI. monoplane (Cross-Channel type), with working drawings and instructions for assembling," is to be secured from the American agents for six hundred dollars.

If you are a good woodworker, you can build a set of planes for about eight hundred dollars. Before doing this, however, it would not hurt to spend fifty dollars or so on aeroplane literature, books, magazines, etc. An aviation directory has just been issued, and there is, I believe, an aeronautical dictionary. It would not hurt

to buy one or two of the practical models advertised in aeronautical journals. These can be had for from one dollar up. You could next easily invest, with profit, five times this sum in railroad fares

and admissions to aviation meets. If you desire to meet other aviators to "talk things over," you'll probably want to join the United States Aeronautical Reserve. Any individual interested in aviation may become an apprentice member on payment of an initiation fee of one dollar and annual dues of one dollar. To become an active member an aviator must be qualified as such by the Aero Club of America. Under this class is included aeronautical inventors, designers, and builders of aeroplanes, dirigibles,

balloons, and aeronautical engineers and mechanics. Initiation fee is the same; but annual dues are two dollars. Flying, you must understand, cannot be learned quite so easily as you can acquire a bad habit.

Before I sat in my Farman biplane I studied it very carefully. I acquired a thorough understanding of every minute part. I took off my coat and got acquainted with the engine. There are schools in England, Germany, and France where you can be taught to fly. At Grahame-White's school, considered one of the best, you may learn to operate a monoplane or a biplane for something over five hundred dollars. To master both types costs about seven hundred and fifty. Of course a nominal deposit is required to cover any possible damage to the machines.

The Wright brothers have two schools, one at Dayton, Ohio, and the other, used mostly during the winter, at Augusta, Georgia. The charge is twenty-five dollars a lesson, and the instruction is given by one of the Wright fliers. At the Curtiss school, just opened at San Diego, California, five hundred dollars is charged. Mr. Curtiss gives the instruction himself, and this is credited toward the purchase price of an aëroplane should the student decide to purchase one. I see also that Alfred J. Moisant, the brother of that daring but ill fated aviator, John B. Moisant, is planning to open a number of schools throughout the United States where instruction will be given in the Moisant metal monoplane.

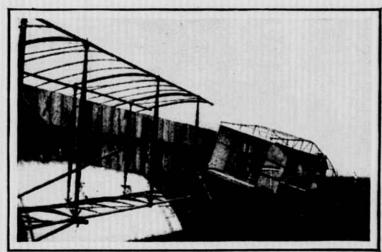
There is also an aviation school in Kansas City which teaches "How to Fly," and one at College Park, near Washington, D. C., called the National Aviation School. An academy was also recently opened on Long Island. Chicago, first in many things, is the first city containing a school that advertises, "Aeronautics taught by Correspondence." This "school" also "assures positions" to "competent aviators."

Then there are quite a number of "birdmen" about the larger cities who will teach you to fly for sums ranging from four hundred to five hundred dollars. Most of these, however, require a bond of two thousand dollars for protection against accidents to the aeroplanes. Many aviators may be found who will take you taxicabbing in the sky for one hundred dollars a trip.

If it is your desire to build your own aëroplane, you can secure the manufactured parts or make them in your own factory, if you happen to have one. One supply house advertises, "Everything from a turnbuckle to the machine itself." Complete sets of working drawings of all parts for a Bl riot XI. (Cross-Channel type) are to be had for from one dollar and fifty cents up to ten dollars. Many original ideas are developed along the line of the Curtiss biplane, there being no patent on this type. Mr. Curtiss himself calls the aeroplane a scientific "product," not an "invention." The Curtiss type, however, is undergoing many changes because of the aileron or side balancing rudders, and it is on this point that

the Wrights contend their patents have been infringed.

Next a propeller must be secured. One can be bought anywhere from forty to one hundred and twenty-five dollars, the price of the favorite European type. The motor is a most expensive if not the most expensive item, and will cost not less than twelve hundred to forty-five hundred dollars. Like a motorboat, you cannot have too good a motor in your aëroplane. Motors require as great care by aviators as singers give to their throats. As long as the motor lasts, an aeroplane continues to be of some value. Unlike automobiles, you may substitute a more



A Flying Machine Boneyard.

efficient motor in your aëroplane, without, I believe, infringing on any rights. This allows amateurs considerable latitude to conduct individual experiments.

We are manufacturing in this country cheaper high grade engines than the Europeans, and this will gradually effect the production of a cheaper a roplane engine. Of course it will be necessary to equip yourself with a complete kit of carpenter's tools and also everything that goes to keep a motor in good condition, or "good temper," as some airmen call it.

Three men can easily be kept busy as an aeroplane crew. An experienced woodworker who knows something about machinery can be secured for twenty-five to forty-five dollars a week. You will need, in addition, a couple of helpers. Seventy-five dollars a week is not too much to keep such a crew working together harmoniously. Add sundry expenses to the pay of your mechanician and helpers, and you'll be fortunate if you keep your crew going for one hundred dollars a week. This amount takes account of ground rent. It does not, however, reckon on serious repairs, such as propellers, which are easily broken and cost from fifty to one hundred and twenty-five dollars each.

Here are some of the items that are absolutely neces-

Continued on page 17